CLAIMS

1. A line concentrator having a plurality of communication ports for relaying transmissions of communication data exchanged among network-compatible apparatuses connected through the communication ports, comprising:

a response storage portion for storing specific response request information and corresponding response information in association with each other;

a destination information storage portion for storing destination information of the network-compatible apparatuses connected through the communication ports individually for part or all of the communication ports;

a response necessity information storage portion for storing response necessity information indicating whether it is necessary to perform a specific response operation or not for each piece of the destination information; and

a control unit for performing:

a communication data judgment operation for judging whether the communication data is

a first communication data which can be answered by returning a proxy response, the first communication data containing, as well as the response request information stored in the response storage portion , a destination included

in the destination information stored in the destination storage portion and the response necessity information indicating that it is necessary to respond,

a second communication data which can not be answered by returning a proxy response, the second communication data not containing the response request information stored in the response storage portion, or

an unanswerable communication data other than the first and second communication data;

a transmission prohibit operation for prohibiting signal transmission to the communication port connected to the network-compatible apparatus corresponding to the destination information for which the response necessity information indicates that it is necessary to respond in the case of the unanswerable communication data and the first communication data; and

a proxy response operation for transmitting the response information corresponding to the response request information contained in the first communication data to the network-compatible apparatus from which the first communication data has been sent.

2. The line concentrator as recited in claim 1, wherein if the communication data is the second communication data, the control unit transmits a specific signal to the communication port connected to the network-compatible apparatus that is a destination of the second communication data and transmits a specific response to the communication port after receiving a specific response to the transmitted signal.

3. The line concentrator as recited in claim 1, wherein the response storage portion stores the response request information and the response information individually for part or all of the communication ports.

4. A network-compatible apparatus, comprising:

a communication port that is connected to a line concentrator;

a power supply for supplying electric power suited for normal mode and electric power suited for power save mode; and

a signal monitoring section for detecting signal transmission from the line concentrator during the power save mode and causing the power supply to transfer to the normal mode when the signal transmission is detected

regardless of signal content.

5. The network-compatible apparatus as recited in claim 4, further comprising a response information transmission unit for transmitting specific response request information and corresponding response information to the line concentrator.

6. A communication system employing one or more line concentrators as recited in any one of claims 1 through 3 with one or more network-compatible apparatuses as recited in claim 4 or 5 connected to each of the line concentrators.